Listing of the Claims:

1.   (Currently Amended) A method ~~comprising a step (a)~~ of selecting a target destination from among first and second target destinations, the method comprising:

determining first and second preliminary seek lengths between a source cylinder on a data storage disc corresponding to a source head and target cylinders on the data storage disc corresponding to the first and second target destinations based on lateral distances from the source cylinder to the target cylinders;

generating ~~using at least two adjusted seek lengths comprising lateral distances from a source location to respective target destinations, the at least two adjusted seek lengths including~~ a first adjusted seek length for the first target destination and a second adjusted seek length for the second target destination, ~~wherein each of the first and second adjusted seek lengths are adjusted~~ by adjusting the first and second preliminary seek lengths using respective lateral offset indicators that represent offsets in the lateral distance of target heads from the target cylinders relative to the first and second preliminary seek lengths and that are generated in response to ~~derived from~~ a longitudinal position measurement of [[a]] the source head ~~at a source location;~~ and

selecting the target destination in response to the first and second adjusted seek lengths.

2.   (Currently Amended) The method of claim 1, further comprising: ~~in which the selecting step (a) includes steps of:~~

(a1) estimating several preliminary seek lengths each corresponding to a queued command, a first one of the estimated preliminary seek lengths comprising the first adjusted seek length;

(a2) determining that the first adjusted seek length corresponds to one of the queued commands that refers to a non-ideal target, the non-ideal target not being reliably reachable within a one-cycle delay; and

(a3) selecting another of the queued commands to be executed immediately so that the selected command refers to the second target destination, the second target destination being reliably reachable within a partial cycle delay.

3.   (Currently Amended)) The method of claim 1, further comprising: ~~in which the selecting step (a) includes a step~~

~~(a1) of~~ deriving an adjusted seek length for each one of several queued commands, two of the several adjusted seek lengths being the first and second adjusted seek lengths.

4.   (Currently Amended) The method of claim 1, further comprising: ~~in which the selecting step (a) includes a step (a1)~~ of obtaining the longitudinal position measurement as a scalar value using the source head, wherein the source head cannot access the first or second target destination.

5.   (Currently Amended) The method of claim 1, further comprising: ~~in which the selecting step (a) includes a step (a1) of~~ calculating each of the adjusted seek lengths as an arithmetic combination of several terms, at least one of the terms being a sinusoidal function of the longitudinal position measurement.

6.   (Currently Amended) The method of claim 1, further comprising: ~~in which the selecting step (a) includes steps of:~~

(a1) determining a source cylinder identifier, a source head identifier, and a source sector identifier for the source head, the source sector identifier being the longitudinal position measurement;

(a2) receiving many queued commands that each include a target cylinder identifier, a target head identifier, and a target sector identifier;

(a3) computing a difference between the source cylinder identifier of the determining step (a1) and each of the target cylinder identifiers so as to obtain a preliminary seek length corresponding to each of the queued commands of the receiving step (a2);

(a4) identifying at least two of the queued commands of the receiving step (a2), the preliminary seek length corresponding to each of the identified commands being smaller that a predetermined threshold;

(a5) adjusting the seek length corresponding to each of the identified commands of the identifying step (a4), the adjustments each being partly based on the corresponding identified

command's target head identifier, on the source head identifier, and on the source sector identifier, the adjustments being the lateral offset indicators, the adjusted seek lengths including the first and second adjusted seek lengths;

(a6) deriving several latency indicators each corresponding to one of the queued commands of the receiving step (a2), each of the latency indicators based on the corresponding command's target sector identifier and seek length, at least two of the several latency indicators based on the adjusted seek lengths of the adjusting step (a5); and

(a7) executing one of the queued commands of the receiving step (a2) selected based on the latency indicators of the deriving step (a6), using as the target destination the selected command's target cylinder identifier, the selected command's target head identifier, and the selected command's target sector identifier.

7.   (Currently Amended) The method of claim 1, further comprising: ~~in which the selecting step (a) includes steps of:~~

(a1) positioning a disc stack rigidly supporting at least two pre-written data storage discs into a disc drive so that the target destination is a storage location on one of the data storage discs; and

(a2) deriving a calibrated offset model that defines how the longitudinal position measurement affects the lateral offset indicators.

8.   (Currently Amended) An apparatus including:

a disc stack having at least one rotatable data storage disc including at least two data storage surfaces; and

a controller configured to select a target destination on one of the data storage surfaces from among first and second target destinations using at least two adjusted seek lengths comprising lateral distances from ~~a source location~~ first and second target heads corresponding to the first and second target destinations to the respective first and second target destinations, the at least two adjusted seek lengths including a first adjusted seek length for the first target destination and a second adjusted seek length for the second target destination, wherein ~~each of~~ the first and second adjusted seek lengths are generated by adjusting first and second preliminary seek lengths that represent respective lateral distances from a source cylinder to first and second

target cylinders corresponding to the first and second target destinations in response to [[a]] corresponding lateral offset ~~indicator~~ indicators that represent offsets in the lateral distance of the first and second target heads from the first and second target cylinders relative to the first and second preliminary seek lengths and that are generated in response to ~~derived from~~ a longitudinal position measurement of a source head.

9.   (Previously Presented) The apparatus of claim 8, further including: a target head able to access the target destination but not able to access-a source location; wherein the source head is able to access the source location but is not able to access the target destination.

10.   (Original) The apparatus of claim 8, in which the controller includes a random-access memory configured to contain a queue of more than 32 disc access commands in which each of the commands includes a target cylinder identifier, a target head identifier, and a target sector identifier.

11.   (Currently Amended) A method comprising:
generating ~~adjusting~~ estimates of [[a]] first and second seek lengths that represent ~~comprising~~ lateral distances of first and second target heads ~~from a source~~ location to respective first and second target ~~destinations~~ cylinders for queued disc access commands by adjusting first and second preliminary seek lengths that represent lateral distances from a source cylinder to the first and second target cylinders to compensate for lateral offset present between a source head that performed a previously executed disc access command and the first and second target heads ~~that will perform the queued disc access commands~~.

12.   (Previously Presented) The method of Claim 11, further comprising:
receiving first and second disc access commands, the first and second disc access commands identifying respective first and second target locations on the disc, each target location including a target cylinder, a target head and a target sector; and
generating a first preliminary seek length for the first disc access command in response to a source cylinder and the target cylinder of the first disc access command, and generating a

second preliminary seek length for the second disc access command in response to the source cylinder and the target cylinder of the second disc access command;

wherein adjusting the estimates of the seek lengths comprises:

generating a first seek length adjustment for the first disc access command in response to the source sector, the source head and the target head of the first disc access command, and generating a second seek length adjustment for the second disc access command in response to the source sector, the source head and the target head of the second disc access command; and

generating first and second adjusted seek lengths in response to the first and second preliminary seek lengths and the first and second seek length adjustments.

13.   (Previously Presented) The method of Claim 12, further comprising:

selecting one of the first or second disc access commands for execution before the other one in response to the first and second adjusted seek lengths.

14.   (Previously Presented) The method of Claim 12, wherein generating the first seek length adjustment comprises generating the first seek length adjustment in response to a source head and the target cylinder of the first disc access command, and wherein generating the second seek length adjustment comprises generating the second seek length adjustment in response to the source head and the target cylinder of the second disc access command.

15.   (Previously Presented) The method of Claim 12, further comprising:

receiving a plurality of disc access commands, each of the plurality of disc access commands identifying a respective target location on the disc, including a target cylinder, a target head and a target sector;

generating a preliminary seek length for each of the plurality of disc access commands in response to a source cylinder and their respective target cylinders; and

comparing the preliminary seek lengths to a threshold, and selecting the first and second disc access commands for consideration in response to their preliminary seek lengths being less than a threshold seek length.

16.   (Previously Presented) The method of Claim 12, further comprising:

in response to the first and second adjusted seek lengths, determining if the target location of the first or second disc access command can be reliably reached within a full revolution of the disc; and

selecting for execution one of the first or second disc access commands that can be reliably reached within less than a full revolution of the disc.

17.   (Previously Presented) The method of Claim 12, wherein generating the first and second seek length adjustments comprises calculating each of the first and second seek length adjustments as an arithmetic combination of several terms, at least one of the terms comprising a sinusoidal function of the source sector.

18.   (Previously Presented) The method of Claim 17, wherein at least another of the terms of the arithmetic combination comprises an exponential function of the destination cylinder.